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ABSTRACT

Home care has not consistently proven to prevent institutionalization, reduce mortality rates, reduce hospital use, or improve functional status and morale; and indeed, these objectives may be unreasonable. Rather, the purpose of home care should be to meet immediate needs of recipients which they can no longer meet themselves. Publicly-funded home care was evaluated in a study which employed quality of circumstance, a construct which includes observable conditions and behaviors such as eating regularly, having a clean residence and clothing, and ability to go out. Participants were selected from 1,068 elderly hospital patients who were functionally disabled, of low or moderate income status, and able to sign a consent form. Four months after hospitalization, participants (N=633) who had returned to home settings were interviewed on quality of circumstances subscales, including shelter, privacy, safety, household supplies, eating, choice, laundry, clothing, housecleaning, quietness, and activity. The quality of circumstances measure gave a detailed picture of living conditions linking specific problems to quality of circumstance subscales. Refinement of the scale should include improved item content, subscales corresponding to functioning measures, and improved format. (ABL)



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Effects of Home Care on the Quality of Circumstances of the Elderly

by

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Effects of Home Care on the Quality of Circumstances of the Elderly

What should home care be expected to accomplish? question has been raised repeatedly in the home care evaluation research literature and remains unresolved (see, for example, Frankfather, Smith, and Caro, 1981 and Seidl et al., 1983). Mortality, nursing home admission, hospitalization, change in functional status and morale are the priciple outcome variables which have been examined in the evaluation of the major home care demonstrations in the United States in the past decade. Home Care advocates have been disappointed that the demonstrations have not consistently led to prevention of institutionalization, reduction in mortality rates, reduced use of hospitals, improvement in functional status, and improvement in morale. Questions are now being raised about whether too much was expected of the home care demonstrations (General Accounting Office, 1982). Perhaps home care should be justified on the basis of more modest but more attainable objectives.

A premise for the current paper is that a basic purpose of home care is to assure that recipients experience adequate solutions to problems of daily living. Much if not most of long-term care is concerned with self-care deficits. Long-term care providers are asked to do for people what they cannot do for themselves. It seems reasonable, therefore, that long-term



care should be evaluated most immediately on how well it enables recipients to meet their immediate needs.

Quality of circumstances is a construct which attempts to measure and summarize the nature of daily living experiences of the elderly. The emphasis is on observable conditions and behavior. To some extent, the content is concerned with matters which should be immediately sensitive to help. Eating regularly, having a clean residence, having clean clothing, and going out for any of a variety of reasons may all reflect rather directly on the adequacy of help. Quality of circumstances also addresses the environment in which the elderly live. being of the elderly depends not only on the availability of help but the presence of certain material resources. household is to be stocked adequately, it is important not only that someone be available to shop, but also that there be money to pay for supplies. If a worker is expected to prepare meals, it is essential that the housing unit have a stove, refrigerator, and sink. Accordingly, quality of circumstances is designed to reflect both the basic physical environment and the help provided by caregivers. It is noteworthy that attention to physical environment in home settings as an aspect of quality of circumstances parallels the attention which facilities receive in evaluation of institutions (see, for example, Moos et al., 1979).

In the formulation described here, only the most basic aspects of the physical environment were considered. No attempt



was made to differentiate between those living with minimally adequate goods and those enjoying greater levels of material comfort. The quality of circumstances measure includes eleven subscales: shelter, privacy, safety, household supplies, eating, choice, laundry, clothing, housecleaning, quietness, and activity.

The current paper describes use of the quality of circumstances measure in a study concerned with publicly-funded home care for the low-income elderly in New York City. A sample of 1,068 functionally disabled elderly was recruited from inpatient units in six general hospitals. The sample was limited to those whose functional disabilities were expected to be of long duration, whose incomes were low or moderate, and who were alert enough to be able to sign a consent form. Study participants were tracked for twelve months after acute care ended. The quality of circumstances measure was administered through a personal interview four months after acute care ended to those who returned to a home setting. Follow-up data were collected for 633 subjects. Most interviews were conducted with the elderly subjects. In a small proportion of cases, data were provided by proxies. A combination of in-person and telephone interviews was used. (The interviewing mode was found to make no important difference.)



Overall Patterns

Of initial interest is the overall configuration of circumstances reported by those surveyed. Summarized in Table 1 is the extent of positive responses to most of the individual items. Overall, the data show a high proportion of positive answers for individual items. In the shelter domain, basic plumbing and appliances were reported present more than 95 percent of the time; the plumbing and appliances were reported in good working condition more than 95 percent of the time. Over ninety percent had telephones. Basic household furnishings were present more than 95 percent of the time. Temperature control in the housing unit, however, was an issue for some. For approximately a third, there were some problems with heating and cooling. Problems were present in both summer and winter.

For most, privacy was not an issue. Over 90 percent had their own sleeping room or shared the room with a spouse. Over 90 percent also had ready access to a room to entertain guests privately.

Safety was much more frequently reported as a problem. Only 40 percent considered their neighborhood safe from street
crime in the daytime. Over ten percent claimed to have been a
victim of crime on the street in the past year. Reports on
building security were more positive. In 94 percent of the cases
outside doors were regularly locked. Although the questions



TABLE 1

SELECTED QUALITY OF CIRCUMSTANCE ITEMS

PERCENTAGE OF POSITIVE REPORTS

QUALITY OF CIRCUMSTANCES DOMAINS AND ITEMS

PERCENT POSITIVE

| SHELTER | AVAILABLE | GOOD WORKING CONDITION |
|--|----------------------|---------------------------|
| Household Equipment Flush toilet Bathtub or shower | 99.7 99.7 | 96.9 97.7 |
| Wash basin | 98.7 | 99.0 |
| Kitchen sink Range or cooking stove | 97.3 97.0 | 98.2 97.7 |
| Refrigerator | 98.1 | 98.2 |
| Telephone | 92.5 | - |
| Household Furnishings Bed | PRESENT 98.3 | |
| Chair | 95.1 | |
| Eating Table Window cover in alconing room | 96.0 98.1 | |
| Window cover in sleeping room | | |
| | ALWAYS OR USUALLY | , |
| Temperature in Living Area | CCMFCRTABLE | |
| Winter Summer | 68.3 62.6 | |
| PRIVACY | YES | |
| Private sleeping room | 94.1 | |
| Room for entertaining guests always available | 90.9 | |
| • | | |
| SAFETY Neighborhood safe from street | | |
| crime in daytime | 40.3 | |
| Not personally attacked on street in past year | 88.5 | |
| Working lock on outside building doors | 94.4 | |
| Outside doors regularly locked | 85.5 | |
| Controlled entry to building at all times (doorman or buzzer | | |
| system) | 58.9 | |
| Can always see or speak to visitors before opening door | 81.1 | |



| HOUSEHOLD PROVISIONS Food (e.g., bread, eggs, coffee) Household items (e.g., light bulbs Medical supplies Personal care products Tobacco | IN | SUPPLY PROFLEM PAST TWO WEEKS 84.9 88.9 89.7 90.6 91.9 | |
|--|-----|--|---|
| EATING* Three meals yesterday Snacks yesterday Easic Foods | | YES 61.9 52.8 | |
| Grain or potato product yesterday* Meat or other protein* Fruits or vegetables* Coffee, tea, or juice* Amenities Alcoholic beverages | | 95.6 95.3 89.1 95.4 | |
| Desserts or other sweets | , i | 54.7 s explained by a | 1 |

 $\stackrel{\star}{\sim}$ Excludes those whose nonconsumption is explained by dietary restrictions

| tasty or good Had enough to eat yesterday | 84.2 91.9 |
|--|--------------|
| CHOICE** | |
| Satisfied with role in meal planning | 96.7 |
| Entirely free in selecting radio programs | 95.2 |
| Entirely free in selecting TV programs | 93.5 |
| Free to listen to radio as much as desired | 98.4 |
| Free to watch TV as muchs as desired | 98.2 |
| Free to sleep in morning as long as desired | 95.7 |
| Free to nap in afternoon | 95.3 |

Yesterdays food rated very

 $\dot{\approx}\dot{\pi}$ Excludes those without radio or TV; assumes no conflict between spouses regarding radio or TV use.

LAUNDRY

Clean clothing available whenever needed 84.3



| CLOTHING Exterior winter wear Interior winter wear Interior summer wear Rainwear Special occasions | COMPLETELY 67.5 70.4 72.2 66.9 65.4 | |
|---|---|--|
| HOUSECLEANING Floor cleaned in eating area Dishes washed Bed made Trash removal | A FEW TIMES A WEEK 30.5 3.0 5.8 21.0 | ONE A DAY OR MORE 46.9 95.5 88.7 76.0 |
| ACTIVITIES Reads newspaper 5-7 days per week** Listens to radio at least 30 minute per day* Watches TV at least 30 minutes per day** Variage on bobby at least once a | 38.0 74.4 88.9 | |
| Works on hobby at least once a week*** Has had visitors in past month Has gone out in past two weeks | 53.6 80.8 70.7 | |



^{*} Exlcudes those unable to hear ** Excludes those with serious visual impairments *** Those with hobbies only

concerned with safety within the building generally elicited positive responses, problems were more frequently reported than in the domains previously discussed.

Questions concerned with the presence of household provisions consistently elicited positive responses. Food was more likely to pose a problem than other provisions. Approximately 15 percent had been inconvenienced recently by the absence of a needed food item.

Information on eating experiences was elicited in three ways. Respondents were asked how often they ate, what kinds of foods were included in their diets, and how they judged the food. Although the generally positive reporting pattern continued, there were notable exceptions. Only 62 percent reported eating three meals on the previous day. Approximately half had snacks at some time during the day or evening. The vast majority claimed that basic foods were included in their diets. Food amenities, however, were much less often consumed. Fifty-five percent had a dessert or another sweet at some time on the previous day. Only six percent admitted having had an alcoholic beverage on the previous day. Respondents tended to make positive judgments about the food they ate on the previous day. Eighty-five percent rated it very tasty or good. Ninety-two percent had enough to eat.



All choice questions elicited positive responses from at least 90 percent of the respondents. The questions covered such matters as meal planning, selection of television programs, and discretion in sleeping patterns.

The single item on laundry elicited a positive response from 84 percent of the respondents.

Respondents were asked to indicate their satisfaction with five clothing categories on a four-point scale. In each of the categories approximately two-thirds selected the most positive category completely satisfied. Respondents were particularly satisfied with their clothing for interior wear. Characteristically, nearly ninety percent responded "completely satisfied" or "somewhat satisfied" to the clothing questions.

Overall, no widespread problems were reported on the house-cleaning questions. Over three-quarters had the floor cleaned in their eating area at least a few times a week. Fully 97 percent claimed to have the trash removed at least a few times a week. Ninety-six percent had dishes washed daily. Nearly 90 percent had their beds made daily.

Responses to the activity questions were more varied. Near-ly 90 percent watch television at least 30 minutes a day. Less than 40 percent are regular newspaper readers. Eighty-one percent had visitors in the previous two weeks. It should be noted that activity questions were adjusted to exclude those whose vision



or hearing problems precluded particular activities. The activity patterns reported reflect a combination of opportunity and choice. The crude data reported here do not provide a basis for separating opportunity from choice in explaining activity.

Scoring Quality of Circumstances

To provide a basis for summarizing quality of circumstances data, scores were developed for the ten domains described above for all of the service-sensitive domains together, and for all domains combined. In deriving a composite Quality of Circumstances score which could fully summarize the data, two analytic problems had to be overcome. The first was how to compare and sum items which had different metrics — that is, some items had simple yes/no responses while others had four or five scale points — and the second was to decide if each item should be considered of equal importance. Should eating regularly, for example, be considered as important as having clean clothing? Two research decisions were made to resolve these issues. One was to standardize the raw scores. The second decision was to weigh the various items to adjust for differences in importance.

As an adjustment for differences in item construction, individual items were standardized, producing a standard score
for each item with a mean of 0 and standard deviation of 1. The
resultant score is now a relative rather than an absolute score,
and an individual's standing is assessed in relation to its
distance from the mean.



Data in the activities domain required adjustment before being made part of the QOC score. Activity scores were constructed to reflect only activities which were possible for participants in light of their physical and mental conditions. The final activity score then has in the numerator the number of activities reported and in the denominator the number of activities possible for that person. It is this conceptually refined measure which is part of the overall QOC score.

A panel of judges was used to weigh items according to their importance. The 58 judges were a combination of home care administrators and case managers and participants in the New York City Retired Senior Volunteer Program. The judges were asked to rate the severity of a variety of problems faced by the functionally disabled elderly. Individual statements were based on the worst conditions reported by subjects on individual quality of circumstance items. Problems were rated on a scale ranging from 1 to 7 with "NO PROBLEM" and "EXTREMELY SERIOUS PROBLEM" used as end points.

For each item, a mean judgment was determined and used as a weight for the corresponding quality of circumstance item. Each of the items in a domain was multiplied by the mean judgment score for that item. For weighting purposes, standardized scores were summed and restandardized to achieve a mean of zero and a standard deviation of one (Rosenthal and Rosnow, 1984).



For a portion of the analysis reported below, a distinction is made between the full quality of circumstances scale and the portion more likely to be service-sensitive. In the calculation of a service-sensitive version of quality of circumstances, the shelter and safety subscales were excluded. All other subscales were included.

Components of the QOC measure show low to moderate correlations to one another and the total scale (Table 2). One pattern that emerges from this table is the particularly strong interrelationships among those aspects of quality circumstances less susceptible to change through assistance addressed to functional deficits. Adequacy of the home environment, safety and security, and questions of the neighborhood are particularly highly intercorrelated.

Interestingly, the subscale which correlates most strongly with the composite score is the intensity of an individual's activities -- e.g. how often he or she goes outside, reads newspapers, watches TV -- but this aspect of the scale is weakly correlated with every other domain. Adequacy of the environment, satisfaction with clothing, and how often and well a person eats also correlate strongly with summary scores.

The relationships between several background variables (sex, age, size of household, marital status, race/ethnicity, and income) and quality of circumstances were examined. Because only a few statistically significant differences were found, the data



TABLE 2 INTERCORRELATIONS AMONG QUALITY OF CIRCUMSTANCES DCMAINS

| | | | · | | | | | | | | | |
|--------------|-------|-------|--------|--------|--------|--------|--------|--------|--------|-------------|--------|--------------------|
| DOMAINS | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] |
| Shelter[1] | 1.00 | .12** | .30*** | .18*** | .10* | .12*** | .22*** | .08* | .27*** | .20*** | .30*** | .40 *** |
| Privacy[2] | | 1.00 | .14*** | .07 | 11* | .14** | .14*** | 05 | .14*** | . 08 | .18*** | .34*** |
| Safety[3] | | | 1.00 | .09* | 01 | .14** | .19*** | .12** | .19*** | .37*** | .22*** | .35*** |
| Eating[4] | | | | 1.00 | .22*** | .18*** | .29*** | .22*** | .33*** | .25*** | .33*** | .49*** |
| Activity[5] | | | | | 1.00 | .09 | .01 | .15*** | 01 | 04 | .12** | .80*** |
| Choice[6] | | · | | | | 1.00 | .15** | .15** | .14** | .12** | .21*** | .33*** |
| Laundry[7] | | | | | | | 1.00 | .30*** | .33*** | .26*** | .44*** | .28*** |
| House Cleani | .ng[8 |] | | | | | | 1.00 | .10* | .14*** | .18*** | .30*** |
| Household Su | ppli | es[9] | | | | | | | 1.00 | .21*** | .43*** | .27*** |
| Quiteness[10 |] | | | | | | • | | • | 1.00 | .23*** | .26*** |
| Clothing[11] | | | | | | | | | | | 1.00 | .40*** |
| Composite Sc | ore(| 12] | | | | | | | | | | 1.00 |



^{*}p =.05 **p =.01 ***p =.001

are not reported in detail here. Income was related to quality of circumstances, but the relationship is non linear. The lowest quality of circumstances scores occurred among those with incomes between \$3,000 and \$5,000. The quality of circumstances scores of Hispanics were also below those of blacks and whites.

Functional Disability, Help, and Quality of Circumstances

Functional disability by itself was expected to have a negative effect on quality of circumstances. Help, however, was expected to have an ameliorating effect on quality of circumstances. In the abstract, therefore, it seemed possible that those with extremely high levels of functional disability and high levels of help would have a quality of circumstances score as high as those with low levels of functional disability and little or no help.

Two separate measures of functional disability were used:
Activities of Daily Living (ADL) and Instrumental Activities of
Daily Living (IADL). The ADL measure derived from Katz (1970)
is concerned with such basic tasks as eating, dressing, and
transfer. The IADL measure introduced by Townsend (1964) covers
a variety of tasks pertinent to independent living such as
shopping, meal preparation, and use of the telephone.

Overall, the data indicate a negative association between functional disability and quality of circumstances; the more disabled tend to be worse off than the less disabled (Table 4).



TABLE 4

FUNCTIONAL DISABILITY AND QUALITY OF CIRCUMSTANCES

(CORRELATION COEFFICIENTS)

| | QUALITY OF CIP | CUMSTANCES | |
|-------------|----------------------|--------------|--|
| | SERVICE SENSITIVE | ENTIRE SCALE | |
| ADL IADL | 07 09* | 13** 22** | |



^{*} p ±.05

^{**} p=.01

When only the service-sensitive portions of the quality of circumstance measure are used, however, the negative association between functional disability and quality of circumstances is diminished. In the case of IADL disability, the correlation between disability and quality of circumstance is -.22 when the entire quality of circumstance scale is used and -.09 when only the service-sensitive portion is used. For ADL disability, the corresponding correlation coefficients are -.13 and -.07. The components of the quality of circumstances scale which reflect household, building, and neighborhood variables which are not immediately sensitive to services, therefore, explain most of the negative association between functional disability and quality of circumstances.

In the examination of implications of extent of help for quality of circumstances, only the service-sensitive components of the scale were used. To adjust for the implications of functional disability, the sample was divided into three categories on the basis of severity. For this analysis, ADL and IADL scores were combined. Extent of help was measured through a series of items which paralleled the ADL and IADL items. When respondents reported a specific self-care deficit, they were asked whether they received help with that task, how often they received help, and from whom they received help. The total help score was derived by combining frequency of help with various tasks from various sources. For purposes of the analysis reported here,



subjects were divided into low, moderate, and high help categories.

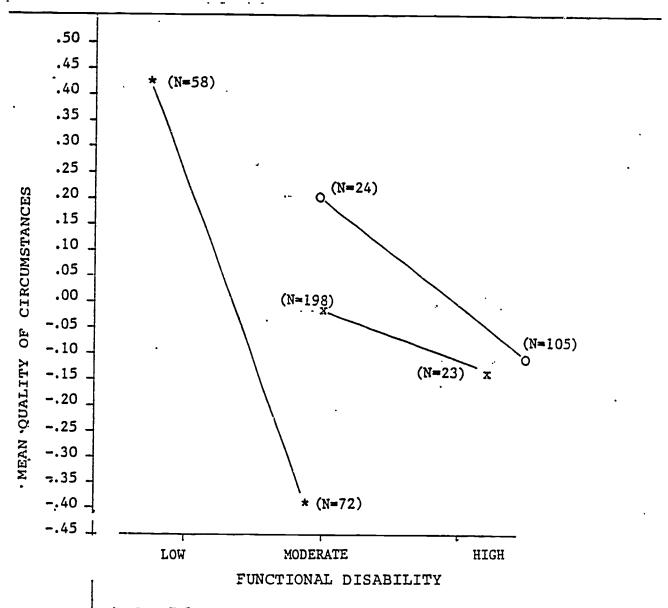
Among the moderately disabled, extent of help has positive implications for quality of circumstances (Figure 1). Among the moderately disabled, the data show a clear progression in quality of circumstances according to the extent of help received. That progression was not found, however, for those in the low and high functional disability categories. Among the least disabled, no meaningful analysis was possible because of the concentration of cases in the low help category. Among the most disabled, quality of circumstances was not affected by intensity of help. For the moderately disabled, the findings were consistent with the hypothesis that extent of help has positive implications for service-sensitive components of quality of circumstances. The reasons for the absence of that expected relationship in the case of the most severely disabled are not immediately evident.

The implications of help for quality of circumstances were addressed also through an examination of the relationship between frequency of help with specific sets of tasks and corresponding quality of circumstance subscales. For seven sets of tasks, the connection between tasks and the quality of circumstance subscale is close enough to justify and examination of the relationship. The extent of help with specific tasks was expected to be positively associated with the corresponding quality



INTENSITY OF TOTAL HELP AND QUALITY OF CIRCUMSTANCES

(SERVICE SENSITIVE) BY FUNCTIONAL DISABILITY[1]



- * Low Help
- x Moderate Help
- o High Help
- [1] Frequencies less than five not reported.



of circumstance subscale. More frequent help with shopping, for example, was expected to lead to more adequately stocked households and more frequent help with meal preparation was expected to prove the quality of eating. In an attempt to control for the effects of functional disability on quality of circumstance, the analysis was limited to those in middle and upper functional disability categories. To the extent feasible, the contributions of formal help and informal help were examined separately.

Results of the analysis are moderately positive (Table 5). Of the 21 correlation coefficients examined, six are statistically significant and in the hypothezised direction. between help and a quality of circumstance subscale is most clearly seen in the case of help with light housework and cleanliness of the residence. In all cases (informal help alone, formal help alone, and formal and informal help together), the extent of help is positively and significantly correlated with the quality of circumstance subscale. In the case of help with heavy housework, a link between extent of help and the cleanliness subscale is seen for help provided by both formal sources and a combination of formal and informal supports. In the case of shopping, a significant positive relationship between extent of help and adequacy of household supplies was found only when informal supports were the exclusive sources of help. In two other cases, help in going outside and activity and help with



TABLE 5

SELECTED CORRELATIONS BETWEEN FREQUENCY OF HELP

AND QUALITY OF CIRCUMSTANCES SUBSCALES

BY SOURCE OF HELP FOR THE MODERATELY AND

SEVERELY FUNCTIONALLY DISABLED ONLY

| SELECTED TASKS | QUALITY OF CIRCUMSTANCE SUBSCALE | INFORMAL CNLY | FORMAL ONLY | BOTH INFORMAL/FORMAL |
|----------------------|--|------------------|----------------|-------------------------|
| Going outside | Intensity of activity | .27 | .09 | .09 |
| Travel short | Intensivy of | | | |
| distance Shopping | activity Needs (house- | C2 | .06 | .06 |
| • | hold supplies) | .21** .17 | .10 | .10 |
| Preparation of meals | Eating | .17 | .10 | .10 |
| Light House- work | Cleanliness | .21* | .28** | .27** |
| Heavy House- work | Cleanliness | 004 | .21* | .21* |
| Laundry | Laundry | . 109 | 18 | 18 |

* p=.05 ** p=.01



meal preparation and eating, the correlations between help and quality of circumstance subscales are consistently positive but do not achieve statistical significance. A negative association between help with laundry and availability of clean clothing is suggested when help comes from formal supports or a combination of formal and informal supports. In neither case is the correlation statistically significant. Why helpers may have been unable to keep pace with needs in this area alone is not clear.

The data generated through this analysis do not provide a basis for concluding that help from formal sources is any more or less effective than help from informal sources. In five instances, help from formal sources was sitively and significantly correlated with a quality of circumstance subscale. In four instances, help from informal sources was positively and significantly associated with a quality of circumstance subscale. In two cases, help from a combination of sources was positively and significantly associated with a quality of circumstance subscale.

Special attention was given to two quality of circumstances subscales, privacy and choice. These domains are distinctive because they are not linked to specific self-care deficits. Rather, it was expected that the cumulative effect of functional disability is to limit choice and that a positive effect of help can be to increase choice. It was also hypothesized that dependence on others for help can have negative effects on



privacy. The help-choice and help-privacy relationships were examined separately for formal and informal helpers. To minimize the negative effects of functional disability, the analysis was limited to those with moderate and severe functional disabilities. None of the correlation coefficients are statistically significant, but the directions of the correlation coefficients are interesting (Table 6). When help is provided only by informal supports, the relationship between intensity of help and choice is negative.

Discussion

Overall, the experience in using the quality of circumstances measure is encouraging. On a descriptive level, the quality of circumstances items yielded a detailed picture of the living conditions of respondents at a relatively concrete level which can be widely understood. Even though the study was limited to correlation analysis, intensity of help was linked to the service-sensitive aspects of quality of circumstances for the moderately disabled group. The analysis linking help with specific problems to quality of circumstance subscales yielded promising results.

The need for refinement of the quality of circumstance's measure is also evident. Improved item content is an important area for future scale development. The insensitivity of quality



TABLE 6

CORRELATIONS BETWEEN TREQUENCY OF HELP BY SOURCE AND CHOICE AND PRIVACY FOR THE MODERATELY AND SEVERELY FUNCTIONALLY DISABLED ONLY

| | | SOURCE OF HELP | | | |
|--|------------------|----------------|-------------------------|--|--|
| QUALITY OF CIRCUMSTANCE SUBSCALE | INFORMAL ONLY | FORMAL ONLY | BOTH INFORMAL/FORMAL | | |
| Choice Privacy | 12 03 | .27 | 01 12 | | |



of circumstances to variations in help for the most severely disabled suggests that scale content may need adjustment for this group. Help may contribute in different ways for the most severely disabled; the instrument in its current form may lack sensitivity to what is accomplished. New items may be needed to capture the immediate contributions of help for the most severely disabled.

In the current version, several subscales correspond directly to specific ADL and IADL items. Development of more Quality of Circumstance subscales which correspond to components of the functional measures might be productive. Bathing and toileting are examples of ADL content for which quality of circumstances content might be added. The quality of circumstances questionnaire was designed for use in an urban environment. The subscales concerned with shelter and neighborhood need adjustment if the scale is to be used in suburban and rural areas. Access to health care is an aspect of quality of circumstances for the functionally disabled elderly. Our questionnaire content in this area was inadequate. Better items are needed so that this subscale can be included.

The format of the quality of circumstance instrument also needs improvement. The human experiences which quality of circumstances seeks to capture are highly complex. Measurement of specific conditions is fundamental to the quality of circumstance concept. The instrument must have enough content to reflect



the complexity of living conditions. At the same time, the questionnaire must be short enough to be manageable. Reconciling these competing requirements is a major challenge. For many research applications, the instrument is already too long; a number of areas in which it might be extended have already been identified here.

The specificity-brevity dilemma might be addressed through the use of filter questions. In each quality of circumstance domain, subjects might be asked first about the conditions in which negative experiences are most common. Only when the filter conditions indicate the presence of problems would the full set of questions be asked.

Standardization of the number of response alternatives for items throughout the questionnaire would facilitate scoring. In the current version, the format of response alternatives was guided by item content. Substantial computer programming effort was needed to place the items and subscales on a common metric. A scoring system which is both simple and sound is needed if the instrument is to be used more extensively.

Refinement of item content and the organization of items into subscales through psychometric scale analysis would be desirable. In the current study, items were organized into subscales on the basis of face validity. To a limited extent, frequency distributions were also used to edit the scales. Psychometric scale analysis would be useful both in eliminating items



low in explanatory power and in validating such subtle subscales as choice in which discretion is linked to specific experiences in such areas as eating and activities.

A fundamental issue in further development of the scale is the validity of interview data collected in a home care context. Quesitons can be raised about the degree to which the functionally disabled elderly are able or willing to report on their circumstances. Some respondents may not be alert enough to understand questions fully. Some are likely to find it difficult to provide certain specific factual information. Willingness of the elderly at home to report candidly on their problems is also a concern. Particularly among those who are determined to stay at home but whose circumstances are precarious, idealized reporting of conditions seems likely. Respondent reports on some aspects of the physical environment can be verified through interviewer observation. On some matters, verification an be sought from informal supports or service providers. The validity of these proxy reports unfortunately is also open to question. Proxies may offer opinions based on misinformation. Their own interests may also lead to distorted reporting. The fundamental problems in using survey methods to study the functionally disabled at home, therefore, will set limits to what can be measured through a refined quality of circumstances measure. In-home care for the elderly as in many other arenas, the policy community will have to work with highly imperfect data.



Quality of circumstances shows promise as a measure through which positive effects of home care can be demonstrated. It is a concept which can be useful in justifying public expenditures for home care. The potential contributions of the measure suggest that further developmental efforts are warranted.



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BIBLIOGRAPHY

- Frankfather, D.L., Smith, M.J., and Caro, F.G. Family Care of the Elderly. Lexington, Mass.: D.C. Heath, 1981.
- General Accounting Office. (IPE-83-1) The Elderly Should Benefit from Expanded Home Health Care But Increasing These Services Will Not Insure Cost Reductions. Gaithersburg, Md.: U.S. GAO, 1982
- Moos, R.H. <u>et al</u>. "Assessing the Social Environments of Sheltered Care Settings." <u>The Gerontologist</u> 19(1) 1979 74-82.
- Seidl, F.W. et al. Delivering In-Home Services to the Aged and the Disabled. Lexington, MA: D.C. Heath, 1983